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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Tomoki Ushida

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EXAMINER

HEYI, HENOK G

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/518,770	<b>Applicant(s)</b> USHIDA ET AL.	
	<b>Examiner</b> HENOK G. HEYI	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims 5-14 is withdrawn in view of the newly discovered reference(s) to Maruyama et al. 5,827,593 (Maruyama hereinafter).

Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Maruyama et al. 5,827,593 (Maruyama hereinafter).

Regarding claim 5, Maruyama teaches a method for manufacturing an optical recording medium, comprising: a molding step of molding a disc-like shaped substrate including an information recording face at least on one side (The disc substrate formed by means of the injection molding, col 4 lines 47+); a light transmitting layer formation step of forming a light transmitting layer thinner than the substrate on the information recording face (The light-transmissible substrate 21b, col 5 lines 9-20); a cutting step of forming a circular cut in the light transmitting layer; and a punching step of punching out at least a part of an area inside the circular cut by a punching tool to form center holes in the light transmitting layer and the substrate (A cut-punch 6 is disposed at the center

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of the inner circumference holding ring 5).

Regarding claim 6, Maruyama teaches the method for manufacturing an optical recording medium according to claim 5, wherein the cut in the light transmitting layer is formed at a larger diameter than an inner diameter of the center hole in the substrate, and the area inside the cut is pressurized in a thickness direction by the punching tool to divide the light transmitting layer at the cut and to punch the light transmitting layer and the substrate, thereby forming the center hole at a larger inner diameter than that of the center hole in the substrate in the light transmitting layer (an injection-means for injecting a molten material into a center of the disc cavity; a cutting-means for cutting a hardened material disposed inside of the holding ring adjacent to the center of the disc cavity; and a circular groove for forming a stack-rib formed on the one of said molding die halves between the holding edge and the cutting-means, col 2 lines 45-58).

Regarding claim 7, Maruyama teaches the method for manufacturing an optical recording medium according to claim 6, wherein a circular protrusion at a larger outer diameter than the inner diameter of the center hole in the substrate is formed on the information recording face at the molding step, the cut is formed in the light transmitting layer along an outer side of an outer circumference of the circular protrusion (the first circular surface including the inner non-data region having the stack-rib of the circular protrusion and the opposite side or the second circular surface being flat, col 4 lines 47-58), and the substrate is punched by the punching tool to leave an outer periphery of the circular protrusion to form an annular protrusion around the center hole in the substrate as well as to form the center hole having a larger inner diameter than an outer

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diameter of the annular protrusion in the light transmitting layer (the fixed bushing 10 and the cut-punch 6 in cooperation cut off the unnecessary portion of the hardened material, col 4 lines 40-46).

Regarding claim 8, Maruyama teaches the method for manufacturing an optical recording medium according to claim 5, wherein a resin having fluidity is supplied to the vicinity of a center of the substrate while the substrate is rotated to allow the resin to flow outward in a radial direction by centrifugal force for spread, thereby forming the light transmitting layer at the light transmitting layer formation step (a heated molten material is injected through the sprue bushing 9 into the cavity 12 by the injection molding device connected to the bushing so that the molten material flows from the central portion towards the outer peripheral in the cavity 12, col 2 lines 1-3).

Regarding claim 9, Maruyama teaches the method for manufacturing an optical recording medium according to claim 6, wherein a resin having fluidity is supplied to the vicinity of a center of the substrate while the substrate is rotated to allow the resin to flow outward in a radial direction by centrifugal force for spread, thereby forming the light transmitting layer at the light transmitting layer formation step (a heated molten material is injected through the sprue bushing 9 into the cavity 12 by the injection molding device connected to the bushing so that the molten material flows from the central portion towards the outer peripheral in the cavity 12, col 2 lines 1-3).

Regarding claim 10, Maruyama teaches the method for manufacturing an optical recording medium according to claim 7, wherein a resin having fluidity is supplied to the vicinity of a center of the substrate while the substrate is rotated to allow the resin to

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flow outward in a radial direction by centrifugal force for spread, thereby forming the light transmitting layer at the light transmitting layer formation step (a heated molten material is injected through the sprue bushing 9 into the cavity 12 by the injection molding device connected to the bushing so that the molten material flows from the central portion towards the outer peripheral in the cavity 12, col 2 lines 1-3).

Regarding claim 11, Maruyama teaches the method for manufacturing an optical recording medium according to claim 8, wherein the light transmitting layer is made of a radiation curable resin, a radiation ray is radiated so that the light transmitting layer is semi-cured at the light transmitting layer formation step, and a reirradiation step of radiating a radiation ray again to the semi-cured light transmitting layer so as to completely cure the light transmitting layer is provided after the cutting step (A protective layer 23 made of an UV-radiation-curable resin is formed, col lines 9-19).

Regarding claim 12, Maruyama teaches the method for manufacturing an optical recording medium according to claim 9, wherein the light transmitting layer is made of a radiation curable resin, a radiation ray is radiated so that the light transmitting layer is semi-cured at the light transmitting layer formation step, and a reirradiation step of radiating a radiation ray again to the semi-cured light transmitting layer so as to completely cure the light transmitting layer is provided after the cutting step (A protective layer 23 made of an UV-radiation-curable resin is formed, col lines 9-19).

Regarding claim 13, Maruyama teaches the method for manufacturing an optical recording medium according to claim 10, wherein the light transmitting layer is made of a radiation curable resin, a radiation ray is radiated so that the light transmitting layer is

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semi-cured at the light transmitting layer formation step, and a reirradiation step of radiating a radiation ray again to the semi-cured light transmitting layer so as to completely cure the light transmitting layer is provided after the cutting step (A protective layer 23 made of an UV-radiation-curable resin is formed, col lines 9-19).

Regarding claim 14, Maruyama teaches a manufacturing device of an optical recording medium, comprising: cutting device for forming a circular cut in a light transmitting layer of a semifinished product of an optical recording medium (A cut-punch 6 is disposed at the center of the inner circumference holding ring 5), the optical recording medium including a disc-like shaped substrate having an information recording face at least on one side and the light transmitting layer thinner than the substrate on the information recording face (The light-transmissible substrate 21b or the second disc substrate 26 inject-molded according to the invention comprises; the first circular surface to be pasted having the inner non-data region 28 formed around a center hole thereof and the outer data region 29 formed around the non-data region, col 5 lines 18-25); and punching device for punching out at least a part of an area inside the circular cut by a punching tool to form center holes in the light transmitting layer and the substrate (A cut-punch 6 is disposed at the center of the inner circumference holding ring 5).

### **Contact**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENOK G. HEYI whose telephone number is (571)270-1816. The examiner can normally be reached on Monday to Friday 8:30 to 6:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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